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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,971	07/15/2003	Nadeen B. Myers	41482-41410	7833
21888	7590	10/07/2005	EXAMINER	
THOMPSON COBURN, LLP ONE US BANK PLAZA SUITE 3500 ST LOUIS, MO 63101			PRATT, HELEN F	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/619,971

Applicant(s)

MYERS, NADEEN B.

Examiner

Helen F. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 18-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 14, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valencia et al. (6,833,146) in view of Kalala et al. (4,871,554) and Reussner (3,968,263).

Valencia et al disclose the use of tricalcium phosphate (TCP) in a dry beverage mix with citric acid and a transparent ingestive liquid (water) (abstract and col. 10, lines 17-70, col. 5, lines 50-70 and col. 6, lines 45-65). Claims 1-4 and 16 differ from the reference in the use of 10-50% of the RDA for calcium per serving. However, the reference discloses the use of calcium hydroxide in amounts of 3% (almost a 1-4 ratio of calcium hydroxide to citric acid) (col. 10, lines 50-65). Kalala et al. '554 disclose the use of TCP in amounts between 10-100% of the RDA (abstract and col. 11, lines 16-25). The composition of Valencia is considered to be fluid because the dry mix has been mixed with water. Reussner discloses the use of from 1-2.5 grams of TCP/qt in a high acid beverage (col. 2, lines 1-12). Therefore, it would have been obvious to substitute the amounts of TCP of '554 in the composition of Valencia for its known function of being a soluble calcium supplement which is free of harsh and bitterness,

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calcium precipitation and the amounts of Reussner in the composition in order to increase the amount of calcium to nutritional levels.

Claims 1 and 17 further require that the TCP solution is dissolved in the acid solution and is free of visible sediment. However, no weight is given in a composition claim to the method of making the composition. The composition has been shown in combination, therefore the composition of Valencia in view of Kalala et al. and Reussner would not have shown any sediment, absent a showing to the contrary. Therefore, it would have been obvious to make the composition as claimed.

Claim 5 further requires that the liquid is shelf- stable. However, nothing new is seen in the use of shelf stable beverages, which are commonly seen as bottled beverages. Therefore, as the technology is well settled as to how to make a shelf stable beverage and the claim only requires that the product is shelf stable, it would have been obvious to make the instant product shelf stable in order to market it over a period of time.

Claims 6-9 further require that the composition is stored at various temperatures. However, it would have been obvious to store at temperatures, which would have kept the ingredients in solution in order for the beverage to be transparent.

Nothing new is seen in the use of carbonation, as in claim 10, or flavoring as in claim 11, or in coloring as in claim 12 or the particular name of the beverage as in claim 13 because it is well known to carbonate, flavor and color a beverage. The composition has been shown as in claim 4 and therefore could be a sports drink or a juice.

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The limitations of claim 17 has been disclosed above and are obvious for those reasons. The TCP is seen to stay in solution since the composition has been shown.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above combined references as applied to claims 1-13, 16-17 above, and further in view of Anderson (EP 0225 684 B1) and Anderson (4,851,243).

Anderson discloses the use of fine particles of TCP, which can be as small as 75 microns (page 6, lines 24-39). No patentable distinction is seen between 44 microns to 8 microns as in claims 14 and 15 absent a showing of unexpected results because the TCP is also disclosed to dissolve quickly at 75 microns in size. Anderson '243 discloses that it is known to use TCP in a particle size of about 44 microns in a beverage (col. 5, lines 50-70). Therefore, it would have been obvious to use a particle size within the claimed size as in claims 14 and 15 in the process of the combined references.

Claims 19-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above combined references including both rejections as applied to claims 1-17 above, and further in view of Palaniappan US 2002/0122866 A1.

The claimed composition has been shown above. Palaniappan discloses that it is conventional to fortify beverages with calcium using a two- step process as in claim 19 (0006). Claim 19 further requires that the fluid composition have from 10-50% of the RDA of calcium per serving. Calcium levels of 10% and higher are disclosed by Palaniappan (page 2, 0026). No specific calcium compound is required in Palaniappan in claim 1. The specification does cite a number of types of calcium, but they are only "for example" (0025). Therefore, it would have been obvious to use the method of

Palaniappan of making a calcium- fortified beverage using the TCP of the combined references.

The further limitations of claims 20-34 have been disclosed above and are obvious for those reasons.

Claim 35 is also a product by process claim. The fact that the procedures of the reference are different than that of applicant is not a sufficient reason for allowing the product-by-process claims since the patentability of such claims is based upon the product formed and not the method by which it was produced. See *In re Thorpe* 227 USPQ 964. The burden is upon applicant to submit objective evidence to support their position as to the product-by-process claims. See *Ex parte Jungfer* 18 USPQ 2D 1796. The composition has been shown above and is obvious for those reasons.

Claim 36 further requires combining TCP in citric acid solution with another fluid at a pH from 2 to 3.5. Palaniappan discloses a process of combining a calcium base and acid to make an acid/base solution and adding it to a beverage (0027 and 0028). The preferred pH is from 3.5 to 5.3 (0032). Claim 36 differs from the reference in the use of TCP. However, claim 1, of the reference to Palaniappan only requires a calcium-containing base and the particular calcium used as in paragraph 0025 are not limited by the ones cited by the phrase "for example". In addition, Kalala et al. disclose the use of TCP in a beverage in nutritional amounts. Therefore, it would have been obvious to add a calcium base to an acid as disclosed by Palaniappan at a pH of 3.5.

Valencia et al. disclose a dry composition as in claim 37. Claim 37 differs in the particular amounts of calcium, which have been disclosed above. The other limitations

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have been disclosed above as in claims 38 and 39. Therefore, it would have been obvious to make a dry composition with amounts of calcium with the RDA as disclosed by the above combined references.

### ARGUMENTS

Applicant's arguments filed 8-12-06 have been fully considered but they are not persuasive. Applicants argue as to Valencia et al, Kalala et al. And Reussner that there will be a precipitate from the TCP and the solution will not be transparent. However, each reference uses TCP in combination with an acid as claimed. Applicants do not require a particular amount of acid in their composition in order to produce a transparent beverage. Therefore, the beverages of the references are seen to have been as transparent as that claimed.

Nothing new is seen as in claim 17 of a "shelf ready" product, which is necessary and well-known in order to sell a beverage.

Applicants argue as to claims 19-34 that the Palaniappan et al. reference does not teach adding TCP to an acid, but to water to form a base solution. However, the claims do not exclude the use of water nor does the Applicant say what compound they are making if it is not a calcium citrate.

Applicants argue that it would not be obvious to substitute calcium hydroxide for TCP. However, the reference discloses adding various calcium compounds to acid. It is not seen that the principle of operation is different since Applicants do not exclude water. In addition, adding TCP to an acid could make a base solution depending on the amounts, which are claimed. Applicants use an acidulent solution, which obviously

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contains water. No patentable distinction is seen at this time. Applicants range of pH's also encompasses that of the reference (3.5). No showing is seen that adding TCP in a solution at the claimed pH to an acid would not yield an aqueous suspension.

As to claim 36, the method has been shown and Palaniappan et al. do add a calcium acid mixture to another liquid as cited in the office action.

Applicants argue as to claim 37, that the use of TCP in a dry composition has not been shown. However, Valencia et al. disclose a dry composition before it has been added to a liquid (col. 10, lines 17-70, col. 5, lines 50-70 and col. 6, lines 45-65).

Applicants argue that combining the dry product with a liquid has not been shown. This is not seen as the references in combination show such. Nothing new is seen in adding a dry beverage mix to a liquid, which could be water.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10-3-05 hp

  
**HELEN PRATT**  
**PRIMARY EXAMINER**